

Anti-Cathepsin B Antibody

ER1905-48



Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IF-Tissue, FC
Molecular Wt:	23/28/37 KDa

Description:	Cathepsin B is synthesized on the rough endoplasmic reticulum as a preproenzyme of 339 amino acid with a signal peptide of 17 amino acids. Procathepsin B of 43/46 kDa is then transported to the Golgi apparatus and cathepsin B is formed. Mature cathepsin B is composed of a heavy chain of 25-26 kDa and a light chain of 5kDa, which are linked by a dimer of disulfide. Cathepsin B may enhance the activity of other protease, including matrix metalloproteinase, urokinase (serine protease urokinase plasminogen activator), and cathepsin D, and thus it has an essential position for in the proteolysis of extracellular matrix components, intercellular communication disruption, and reduced protease inhibitor expression. It is also involved in autophagy and catabolism, which is advantageous in tumor malignancy and is possibly involved in specific immune resistance.
Immunogen:	KLH conjugated synthetic peptide derived from human Cathepsin B heavy chain 251-339/339
Positive control:	Human esophageal carcinoma, Mouse Spleen Lysate.
Subcellular location:	Lysosome. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
Database links:	SwissProt: P10605 Mouse
Recommended Dilutions:	
WB	1:500-2000
IHC-P	1:100-500
IF-tissue	1:100-500
FC	1µg/Test
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage Instruction:	Store at -20℃ for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20℃. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4℃.
Purity:	Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

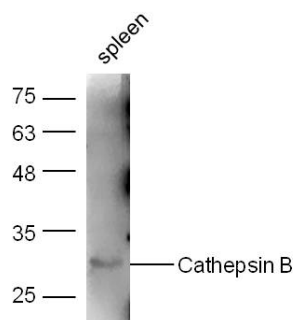
Technical:0086-571-89986345

Service mail:support@huabio.cn

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

**Fig1:** Sample:

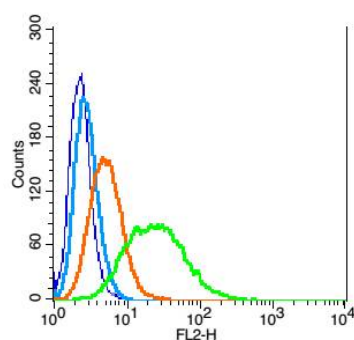
Spleen (Mouse) Lysate at 40 ug

Primary: Anti-Cathepsin B (ER1905-48) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 46/28 kD

Observed band size: 30 kD

**Fig2:** Blank control: RSC96(blue). Primary Antibody: Rabbit Anti-Cathepsin B antibody(ER1905-48), Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG(orange), used under the same conditions); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.**Protocol**

The cells were fixed with 2% paraformaldehyde (10 min). Antibody (ER1905-48, 5μg /1x10⁶ cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody of ER1905-48 at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

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